READING VILLAGE
ARCHITECTURAL PEER REVIEW

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Article I. BACKGROUND

SECTION 1.01 INTRODUCTION

A. This report has been prepared by Russel Feldman, Sarah Oakes and Bob Jefferies of TBA Architects, Inc on behalf of the Town of Reading in relation to a Development Application for the proposed Reading Village Development, a 5 story, multi-family residential development on a 36,296 s.f. lot at the corner of Lincoln and Prescott Streets, Reading MA.

SECTION 1.02 FIRM HISTORY

A. TBA Architects, Inc. has been in the business of "Supporting the Creative Impulse" for thirty years. We specialize design, planning and project management with a focus on public purpose. TBA proudly serves the public, non-profit and private sectors in Massachusetts and beyond. Our expertise in Physical and Financial Feasibility Assessment, Space Planning, Sustainable Design, Adaptive Reuse, Historic Preservation, Municipal Architecture and forensic analysis ranging from Envelope Repair and Universal Design are the tools by which TBA has firmly established its reputation as a dynamic and creative force within and beyond the design community of the greater Boston area. TBA Architects, Inc. additionally provides developers, underwriters and investors with a targeted review of the critical design to facilitate investment decisions. Through our peer review process we offer our clients quality assurance to better evaluate a project's development risk and feasibility at every phase from initial feasibility through design and into construction administration.

SECTION 1.03 DOCUMENTATION

A. This report has been carried out with regard to the following documentation provided by the Town:
   1. Reading Village Application for Comprehensive Permit – January 2016 submitted by MKM Reading, LLC. Documents include the Introduction, Project Data Summary, Engineering of Proposed Building, Existing Conditions Narrative, Aerial Map, Unit Summary Table, Engineering Report and Architectural Plans
   2. Cube 3 Memo dated 2/17/16: Type VA Construction for Reading Village 40B.
   3. Correspondence with Town officials Jean J. Delios, Assistant Town Manager and Julie D. Mercier, Community Development Director

B. Photos taken by Russel Feldman & Sarah Oakes of TBA Architects, Inc. during a site visit on March 7, 2016. Site photos, site photos taken provided on page 2 of this report.

Image #1

Image #2

Image #3

Image #4

Image #5

Article II. SITE OBSERVATIONS

SECTION 2.01 BUILDING MASSING AND SITE

A. Development Use Type: Multi-Family Apartments for Low and Moderate Income Residents. The site is located at 39 Lincoln St. and 2 Prescott St. in Reading, Massachusetts. The proposed development is comprised of two buildings connected on upper floors, wrapping around a commercial building on the corner of Lincoln and Prescott streets. The development consists of a mix of 1-3 bedroom units, with 77 units total.

1. Comments:
    i. Site Context: The site appears to be well connected to public transportation, residential buildings, local businesses, and pubic parks. Residents would have excellent access to local amenities.
    ii. Local Site Zoning: 2 Prescott St & 39 Lincoln St. are both zoned as S15, Single Family Residential Dwellings. The Town of Reading has received a multi-unit residential building application under provisions of MGL chapter 40B ("40B") for this site and is receptive to a multi-family development on the site as long as the scale of the building does not negatively impact the residences around it.
    iii. Density: With the understanding that 40B regulations allow for developments to be built within locally zoned areas that would not otherwise allow them to be built, the proposed development is adding a relatively high density of 92.41 units per acre into a moderate density residential neighborhood block where all of the residences are predominantly 1-3 family homes.

2. Recommendations:
    i. Multifamily housing is an appropriate use for a site located immediately opposite to commuter rail and close to neighborhood commercial facilities and a public park.
    ii. It may be appropriate to include some neighborhood commercial uses on the first floor of Lincoln Street structures.
    iii. Consider lower densities on the site.

B. Scale: The proposed height of the building is consistently 63'-7" to the roof ridge as shown on the North & East elevations and building section provided.

1. Comments:
    i. While handsomely drawn, the Elevations provided do not accurately present the development. The North Elevation only shows the portion of the building that fronts directly on Prescott Street and does not show the entire structure as

proposed. The full elevation would be almost exactly twice the building length. It also indicates the main building entrance in a different location than shown on the plans. Similarly, the East Elevation only shows the section directly abutting the back of the gas station lot. It does not show the continuing façade along Prescott, which would be angled to the viewer, or the raised building link and another parking and residential structure directly facing Lincoln Street. Also, the elevations as submitted consistently show the lower level parking behind a storefront. More complete elevations of the building presented and elevations of the West and South facades would show the residential structures as being almost completely raised one story above grade with parking exposed underneath.

ii. At over 63 feet, the height of this building is jarring and does not fit in with the average height of buildings in the neighborhood where it is proposed, transitioning between the central commercial area and the surrounding residences. The residences abutting the site are all under 35 feet high, and fit within the neighborhood zoning height and the commuter rail station across Lincoln Street is approximately 22 feet.

iii. The proposed massing of the development, with a drastic scale increase from the buildings around it, creates a wall within the neighborhood. The proposed building has a raised courtyard that does not break up the large massing from the street and increases the impact from the viewpoint of the neighbors' back yards. With the proposed massing taking up most of the site, and in some cases extending directly up to the site boundaries, the development effectively has no open space on its site. In this regard it does not remotely relate to the open space character of the abutting residences.

iv. The sun shadows provided to not accurately show how the shadows of this building at the proposed height will impact the adjacent sites. The submission only shows shadows created at 10 AM, noon and 2:30 PM. Neglecting to show earlier and later times understates areas placed in shadow. During the summer evenings for example, the backyards and residences along Washington Street would be in a shadow. The shadow study as presented illustrates how the gas station at the corner of Lincoln and Prescott will be in shadow for most of the year.

v. The roof configuration should be clarified in light of property line issues and also to resolve the link between Buildings A and B (as indicated on Podium Plan). This link appears to exist independently of the main roof but no elevations are provided to clarify the form and roof structure.

2. Recommendations:

i. Reducing the structure by one floor would result in a more appropriate scale.
ii. We would strongly encourage the proposal to incorporate the gas station parcel. This would reduce the stark inconsistency between existing gas station and the proposed structure that surrounds it so closely on two sides. It would also improve the building and site organization, discussed more below.

C. Local Zoning Set Backs: The existing property setbacks required by zoning are as follows, Side Yard 20 feet, Front Yard 15 feet, Back Yard 20 feet. The developer has submitted a waiver request to lessen the required minimum setbacks to less than 11'-0", with the shortest setback requested being 1'-5" at the front yard.

1. Comments:
   i. The civil drawings and architectural drawings provided show differences in roof overhangs and property lines. The current building as proposed takes up most of the site, and in some cases extends right up to the current property boundaries.
   ii. The proposed elevations include as a design feature a deep overhang, perhaps five feet at the eave. Where the building walls are shown to abut the property line, such as along Prescott Street, the eaves will extend into the public parcel, which is not acceptable. (This also creates a problem for egress, discussed below.) Pulling the building back from property lines will have a negative effect on interior organization; eliminating the overhangs would profoundly change the proposal's architectural character.
   iii. Vehicular access to the majority of the site is through the proposed parking garage, making the structure largely inaccessible to fire trucks. The lack of open space around the building further challenges firefighters. With no firetruck access to the rear elevations of either portion of the structure and the proximity of the proposed building to the both adjacent buildings increases a risk for fire spread throughout the neighborhood.
   iv. The absence of open space on the site creates problems for trash storage and pickup and potentially other building operations. Trash storage is not indicated on either architectural or engineering site plans. It would appear that trash pickup could only take place on Prescott Street, where trucks would obstruct traffic.

2. Recommendations:
   i. Reconfigure the building to establish some open space.
   ii. Consider raising the first floor height and configure the parking area to create sufficient overhead room and clear passage for public safety vehicles.

iii. Including the corner parcel could allow reconfiguration to provide a service yard at the back of the development.

D. Materials: Materials are not specifically described in the proposal but the elevations show a shingle style roof, horizontally and vertically lapped cladding systems, smooth panel systems, and a masonry base.

1. Comments:
   i. The gable roofs, deep overhangs, canopy brackets, double hung windows, and differing first floor materials are reminiscent of late Victorian-era residential designs. The materials expressed in the elevations are acceptable for the surrounding neighborhood. Roof shingle and wall lapped cladding systems seem to blend in with the residential buildings that surround the site. The neighborhood consists predominantly of asphalt shingle gable roofs and lapped vinyl siding.

2. Recommendations:
   i. None at this time. However we observe that the many historic materials alluded to in this proposal are quite expensive to install. Financial imperatives often result in materials that, while similar in appearance to historic materials are, when finally constructed, not as durable as those installed in prior generations. (See Article V, below.) Careful scrutiny is advised to assure that the buildings as actually designed and constructed provide the quality alluded to in the proposal.

SECTION 2.02 UTILITIES

A. Service Vehicles and Garbage/Recycling Storage: No provision for garbage and recycling storage or pick up, and visitors and residents' moving vehicles are indicated on the civil or architectural drawings.

1. Comments:
   i. Garbage and Recycling storage is necessary for successful operation of the facility and should be located near elevators. Pickup needs to be located at grade with suitable access to Prescott Street.
   ii. As designed here, it appears that the only area on the proposed site plan that would allow for garbage and recycling storage is alongside the portion of the building's East elevation abutting the back of the gas station parcel, for pickup from vehicles parked on Prescott Street. This function would be visible from the train station and by pedestrians on Lincoln Street.

iii. There is no lane for drop-off or pick-up shown on Prescott Street, so any garbage and trash pick-up would affect traffic flow. Residents' furniture moving vehicles and visitor pick-up/drop-off will also impinge on Prescott Street traffic.

2. Recommendations:
   i. Garbage and Recycling storage must be included, preferably in a service area not visible from public ways along Lincoln or Prescott Streets. It should have an attractive and durable enclosure that is consistent with the project's design.
   ii. Service vehicles should have an on-site short-duration parking location so the traffic impact of this relatively high density occupancy is not exacerbated by street side pickup.

B. Snow Removal & Storage: No Snow storage locations are indicated on site.
   1. Comments:
      i. As noted above, there is very little open site programmed for this site that might serve for snow storage during winter storms. The parking garage does have an open area to the rear where vehicles park partially under cover and partially outside. This area in the winter is likely to develop snow which will need to be moved. With the current building configuration and low clearance, there does not appear to be a way either to remove snow or place it elsewhere on the site.
   2. Recommendations:
      i. Sufficient open space must be provided to store excess snow without impinging on abutting properties.
      ii. Utility vehicles should have access to the rear and sides of the site to accommodate snow storage.

SECTION 2.03 PARKING

A. Off-Street parking and Loading / Unloading Requirements-Apartment: The Town of Reading Bylaw requires 1.5 spaces per unit.
   1. Comments:
      i. The parking plan as drawn on the architectural drawings differs from the civil drawing. The architectural plan (and written proposal) indicates 83 spaces whereas the civil plan indicates 78. Both parking plans are extremely tight for maneuvering but, based on the dimensions available, we believe the civil drawing is more accurate.
      ii. At 78 spaces, it appears that all parking will be for residents only, with one or no visitor spaces provided.

iii. The proposed plan indicates two handicap parking spaces. The Massachusetts Access Board Code 521 CMR Section 23.2.1 indicates that for a multifamily residential building with above 75 parking spaces, 4 spaces must be accessible.
iv. Neither the civil or architectural plan indicates the building structure at grade. For example, columns will have to be placed all along the 190 foot South façade and also at numerous interior locations, resulting in a possible loss of plan efficiency and total number of parking spaces.
v. The parking garage height restricts access for anything other than private cars and vans. It does not allow for most public safety or service vehicles such as fire engines, ambulances, or garbage trucks.
vi. The curbing as indicated on the architectural and civil drawings eliminates parking along the entire length of the project parcel along Prescott Street, eliminating 8 existing parking spaces. This results in a net loss to the existing neighborhood of 8 parking spaces despite adding 77 apartments.

2. Recommendations:
   i. Provide on-site pick-up and drop-off for service, visitor and public safety vehicles.
   ii. Provide a site solution that does not result in a net reduction of existing resident parking.

Article III. SAFETY & EGRESS OBSERVATIONS

SECTION 3.01 EGRESS STAIRS

A. Architectural drawings and civil drawings indicate 3 egress stairs within the proposed building.
   1. Comments:
      i. Egress stairs as presented on plan drawings provided are not feasible. As shown in the "Courtyard Plan" and "Typical Floor Plan", all egress stairs are entered from the building interior at the corridor and descend to a landing on the outside wall, then return to the next floor below towards the building interior. The "Podium Plan" shows the stairs landing at grade, with doors swinging out to the building exterior and also towards the garage on the interior. This is not physically possible, as the stair landing along the outside wall is at the half-level, or approximately five feet above grade.
      ii. As shown in the building plans, the only physically feasible lower level doors are on the parking side of the stair. These doors are allowable for general building circulation but are not an acceptable egress under the Massachusetts Building Code. Section 10.27.1 requires that all exits discharge directly to the exterior of a building. They cannot discharge into a partially enclosed parking area under the building as shown here.
      iii. Additionally, Code section 1027.3 stipulates that exit discharges must be located at least 10 feet from adjacent lot lines. At least two of the exterior-facing exit doors shown on the Podium Plan fall within this 10 feet restriction. Thus, should the stair configuration be changed so that the exterior doors can be made at grade, they would not be code compliant.
      iv. The proposed Podium Plan indicates that there are two buildings in this project, Buildings A and B. If the buildings are considered separate, Building B would need a second egress stair.
   2. Recommendations:
      i. Egress stairs must be reconfigured to discharge to the exterior of the building in code-compliant locations.

SECTION 3.02 ELEVATORS

B. One elevator is indicated on the architectural drawings to service 77 apartment units on four floors. The elevator size, capacity and type are not indicated in documents provided.
   1. Comments:

i. One elevator for 77 units is not sufficient. Wait times would be excessive and would not meet contemporary standards in the marketplace.
ii. The elevator appears to require a pent house which is not indicated on the elevations or roof plan. A hydraulic elevator, which might reduce the penthouse size, would be slower traveling, exacerbating the wait-time problems.
iii. The elevator must be the size required to fit a stretcher at minimum.
iv. A single elevator may not meet a performance standard indicated in the Mechanical and Electrical Equipment for Buildings 5th Edition. This standard requires that 10% of the building's population should be able to be transported out of the building within 5 minutes.
v. Interior corridor layouts result in lengthy distances from the elevator to outlying apartments, as much as 250 feet.

2. Recommendations:
   i. Consider adding another elevator, possibly in Building B.

Article IV. PROGRAMMING OBSERVATIONS

SECTION 4.01 ENTRY

A. The main entry from the Prescott Street sidewalk is located as a small vestibule that has access to the parking garage, elevator, and fire stair.
   1. Comments:
      i. This vestibule is very small for a project of this size. It does not seem to be adequate for the 77 mailboxes that this building will require.
   2. Recommendations:
      i. Provide a larger, more amenable main entry, preferably with access to common facilities such as mailboxes and, if possible, community meeting spaces.

SECTION 4.02 COMMON SPACES

B. Common space indicated on the plans includes the entry vestibule, corridors, trash/recycling, a small MEP space shown opposite an egress stair in building B, and an exterior courtyard space on the first residential floor level.
   1. Comments:
      i. The elevator & stair vestibules on unit levels do not have a window to allow in natural light.
      ii. Corridors are long, with several left and right turns that, while limiting views of their uninterrupted length, may be disorienting.
      iii. Courtyard access is difficult to find, possibly creating a disincentive for frequent use. Narrow approaches will make it difficult for groups of people to meet there. The courtyard approximately ten feet from the back lot line and overlooks the abutting private residences, severely reducing the privacy enjoyed by the current residents.
      iv. For a development of this size there is little recreational or meeting space for the residents. For example, the courtyard is a 3 season space, and the minimal yard provided for residents, children and families occupying the building do not have an area for outdoor activities.
   2. Recommendations:
      i. Make common spaces more varied, with access to windows.
      ii. Improve access and visibility to the courtyard.
      iii. Provide additional recreational and meeting spaces for residents.

SECTION 4.03 UNIT DESIGN

A. Accessibility: No units have been specifically indicated as Accessible Units on the provided architectural drawings.
   1. Comments:
      i. Per MAAB Requirements 521 CMR Section 9.4, residential buildings must provide a minimum of 5% of type 2A accessible units, being those with fully accessible bathrooms, kitchens and bedrooms. This proposal therefore requires a minimum of 4 accessible units.
      ii. The project appears to provide 3 type 2 units.
      iii. Accessible unit designs are largely compliant although there are noncompliant features such as insufficient push/pull areas to the side of door handles at bedrooms and bathrooms.
   2. Recommendations:
      i. 4 fully accessible units are required.
      ii. Resolve noncompliant details in unit layouts.

B. Affordability: 19 Units have been indicated as Affordable Units out of 77 total units.
   1. Comments:
      i. 24.6% of the Units are indicated as Affordable. Per 40B provisions a minimum of 25% of the units must be affordable unless the income thresholds are reduced.
   2. Recommendations:
      i. To meet the 25% threshold, either reduce the total number of units to 76, provide 20 affordable units, or clarify the income eligibility requirements for the proposed projects.

C. General Unit Design: apartment designs are generally well developed with no obvious organizational problems. Some units appear to be awkwardly proportioned, such as the living room in unit 8A.

Article V. REFERENCE PROJECTS

SECTION 5.01 RECOMMENDATIONS

A. Information taken from Reading GIS & Assessors information
   1. 30/52 Haven Street, Reading MA, Parcel ID 016.0-0000-0347.0
   2. Development completed in 2012 and was a 40R affordable housing project.
   3. GIS Narrative Description: "This property contains 33,923 SF of land mainly classified as RES/COMM with a(n) APRTMNT-GN style building, built about 2012 , having BRICK exterior and ASPHALT roof cover, with 60 unit(s), 250 total room(s), 85 total bedroom(s), 68 total bath(s), 34 total half bath(s), 0 total 3/4 bath(s)."
   4. Density of approximately 77 units per acre.

B. Comments:
   i. While somewhat more contemporary in style, this project is similar to the proposed Reading Village Development in selection of materials and many building envelope features.
   ii. The masonry materials observed on this development appear to be Exterior Insulated Finished Surfaces (EIFS) and very thin masonry veneer which raises concern for durability.
   iii. See the following page for illustrations.

Image #2 illustrates discoloration due to water penetration from behind veneer block, which will result in permanent staining eventual deterioration. Image #3 shows separation at the corner joint due to improper detailing of thin masonry tile wall materials. While leaks can be sealed this application of veneer masonry applied to what appears to be framed walls will not have a long life cycle. Image #4 illustrates puncture of relatively fragile wall panels installed against framed walls. Although these panels are sensibly installed above pedestrian heights so as to avoid damage due to vandalism and accidental impact, this type of damage can occur.

Image #1

Image #2

Image #3

Image #4

TBA ARCHITECTS, INC.